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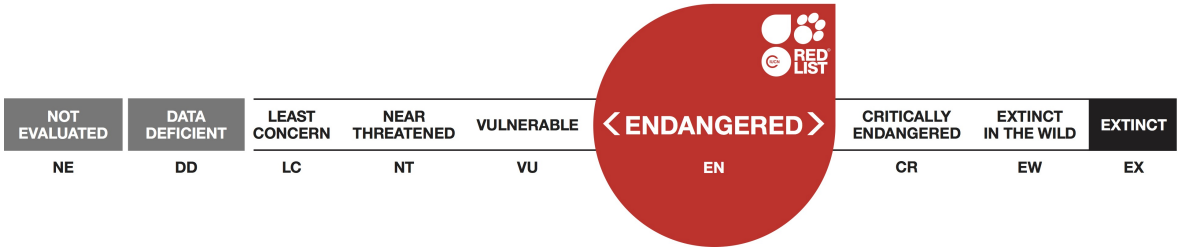
Scope: Global
Language: English

Pittosporum aliferum

Assessment by: Gemmill, C., Veillon, J.-M., Amice, R., Cazé, H., Dumontet, V., Fleurot, D., Garnier, D., Gâteblé, G. & Maggia, L.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Rosales	Pittosporaceae

Taxon Name: *Pittosporum aliferum* Tirel & Veillon

Taxonomic Source(s):

Tirel, Ch. and Veillon, J.-M. 2002. *Flore de la Nouvelle-Calédonie, tome 24. Pittosporaceae*. Museum d'Histoire Naturelle, Paris.

Assessment Information

Red List Category & Criteria: Endangered B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v) ver 3.1

Year Published: 2017

Date Assessed: July 23, 2015

Justification:

Pittosporum aliferum is an endemic small tree of New Caledonia restricted to massifs of Boulinda and Kopéto. A riparian species, *P. aliferum* occurs in humid forest on ultramafic soils from 100 to 800 m asl. Its area of occupancy (AOO) is equal to 32 km² for an extent of occurrence (EOO) of 159 km². A total of four locations are affected by mining activities. The combined threats of fire, invasive animal species such as the Rusa Deer and the major threat of mining activities, allows us to infer a continuous decline of AOO, EOO, quality of habitat, number of locations and number of mature individuals. Using criterion B, *P. aliferum* qualifies for listing as Endangered (EN) B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v).

Previously Published Red List Assessments

1998 – Endangered (EN)
http://dx.doi.org/10.2305/IUCN.UK.1998.RLTS.T35260A9916662.en

1998 – Endangered (E)

Geographic Range

Range Description:

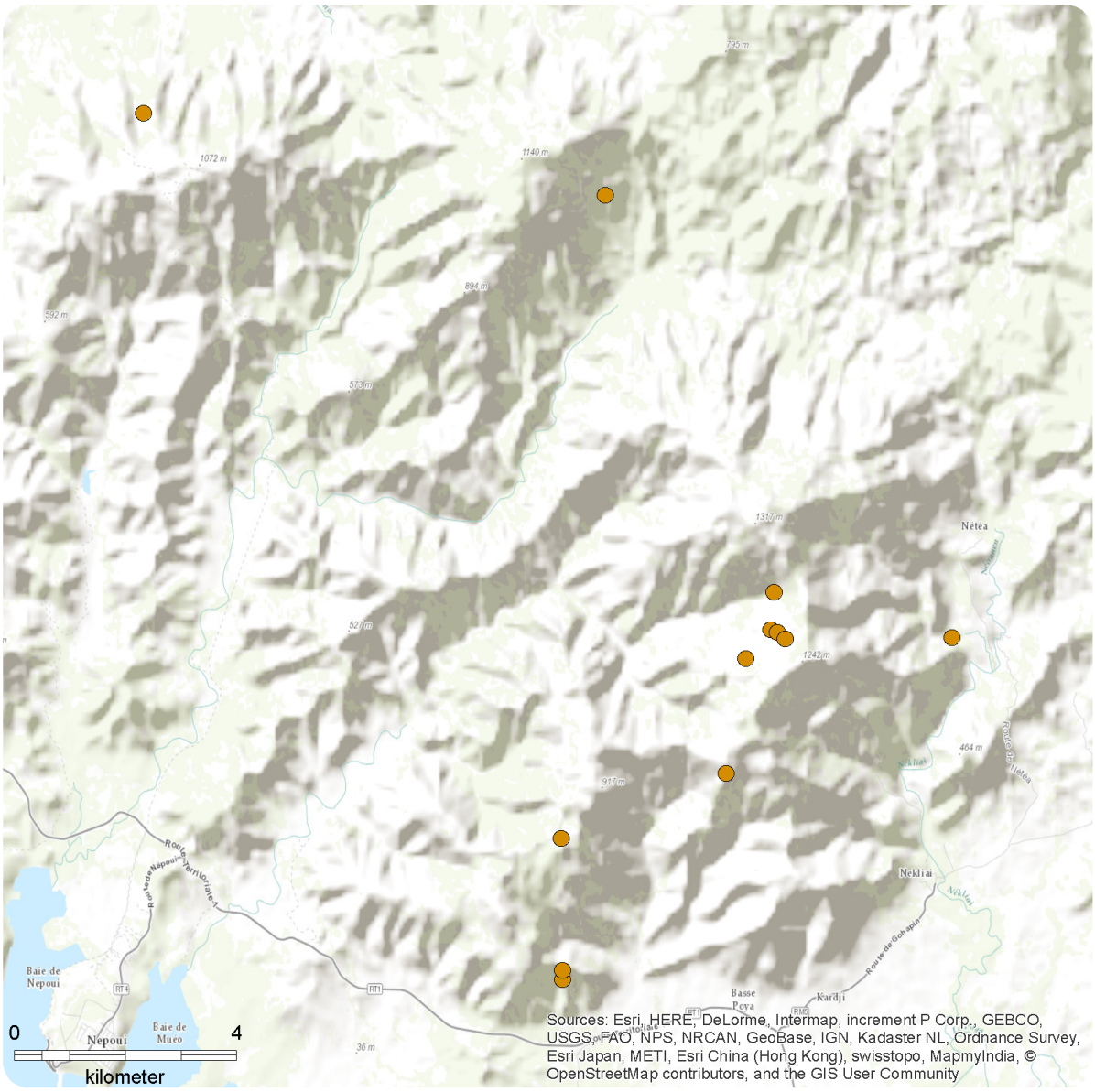
Pittosporum aliferum is an endemic small tree of New Caledonia restricted to massifs of Boulinda and Kopéto.

Country Occurrence:

Native: New Caledonia

Distribution Map

Pittosporum aliferum



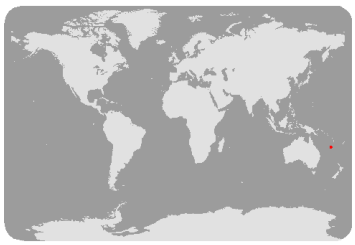
Range

Extant (resident)

Compiled by:

IUCN SSC New Caledonia Plants RLA

NE DD LC NT VU EN ENDANGERED CR EW EX



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

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Population

The precise population size is unknown, but due to its ecology, this could reach 2,500 mature individuals.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

A riparian species, *Pittosporum aliferum* occurs in humid forest and on forest edges on ultramafic soils from 100 to 800 m asl.

Systems: Terrestrial

Threats (see Appendix for additional information)

On Boulinda and Kopeto, past and future mining activities form the primary threat, especially with the potential reopening of the mine on Boulinda. New Caledonia contains between 20 - 30% of the world's nickel resources. Intense mining activities since the late 19th century have generated soil erosion (1.2% of bare ground mapped by SPOT5 in 2007). Fire constitutes a potential threat on Boulinda and Petit Boulinda summits, and on Ouaté locality. Erosion has also been observed on Ouaté, which could affect the population of *Pittosporum aliferum*. Finally Rusa Deer, a major invasive species in New Caledonia constitutes a potential threat to regeneration of the population via grazing of seedlings.

Conservation Actions (see Appendix for additional information)

Pittosporum aliferum is protected by legislation in Province Nord and Province Sud. Nevertheless, this species is not found in any protected areas. In order to assure survival of this species, it should be protected (by fencing from deer) on Boulinda. In order to advance knowledge on New Caledonian species of *Pittosporum* species, and especially the relatedness of *P. aliferum* and *P. collinum*, further research, such as fine-scale phylogenetic and ecological studies, is urgently required.

Credits

Assessor(s): Gemmill, C., Veillon, J.-M., Amice, R., Cazé, H., Dumontet, V., Fleurot, D., Garnier, D., Gâteblé, G. & Maggia, L.

Reviewer(s): Tanguy, V.

Facilitators(s) and Compiler(s): Chanfreau, S.

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Tirel, Ch. and Veillon, J.-M. 2002. *Flore de la Nouvelle-Calédonie, tome 24. Pittosporaceae*. Museum d'Histoire Naturelle, Paris.

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External Resources

For Images and External Links to Additional Information, please see the Red List website.

Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	-

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
3. Energy production & mining -> 3.2. Mining & quarrying	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
7. Natural system modifications -> 7.3. Other ecosystem modifications	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive and other problematic species, genes & diseases -> 8.2. Problematic native species/diseases -> 8.2.2. Named species (Rusa timorensis)	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.3. Indirect species effects -> 2.3.7. Reduced reproductive success		

Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: No
Invasive species control or prevention: No
In-Place Species Management
Successfully reintroduced or introduced beningly: No

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Conservation Actions in Place
Subject to ex-situ conservation: No

Conservation Actions Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions Needed
1. Land/water protection -> 1.1. Site/area protection
2. Land/water management -> 2.1. Site/area management

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed
1. Research -> 1.1. Taxonomy

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km²): 32
Continuing decline in area of occupancy (AOO): Yes
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km²): 159
Continuing decline in extent of occurrence (EOO): Yes
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 4
Continuing decline in number of locations: Yes
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 100
Upper elevation limit (m): 800
Population
Number of mature individuals: 2500-10000
Continuing decline of mature individuals: Yes
Extreme fluctuations: No
Population severely fragmented: No

Population
No. of subpopulations: 4
Extreme fluctuations in subpopulations: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 0

The IUCN Red List Partnership

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